UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,755	08/07/2001	Enrique Musoll	P3827	2315

24739 7590 05/05/2005		EXAMINER
CENTRAL COAST PATENT AGENCY		LE, VIET Q
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ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 05/05/2005

CENTRAL COAST PATENT AGENCY
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AROMAS, CA 95004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/924,755	MUSOLL ET AL.
	Examiner	Art Unit	
	Viet Q. Le	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _07 August 2001_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-12_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-12_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _08/07/2001_.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1.   The information disclosure statement filed 08/07/2001 fails to comply with 37

CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document;

each non-patent literature publication or that portion which caused it to be listed; and all

other information or that portion which caused it to be listed. It has been placed in the

application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Sharma

(U.S. 5,559,970).

Regarding claims 1 and 7, Sharma disclosed a packet processor (Figure 1,

processors P's) having a local packet memory (LPM) (Figure 1, M's) for storing packet

data during processing, the LPM having at least one memory access port, a system for

managing port contention, comprising:

A buffer for queuing read/write requests to the port (Figure 6, blocks 106-109;

Column 3, lines 48-67); and

A logic mechanism associated with the buffer for determining busy status of the

port for a pending request to the cell, and for issuing an appropriate command if the port

is busy (Column 3, lines 48-67);

Characterized in that the logic mechanism, if the port is determined to be busy,

issues a command for a temporary cessation of write requests to the buffer (Column 3,

lines 48-67).

Regarding claims 2 and 8, Sharma disclosed the system of claim 1 for preventing

download of packet data from the LPM before all write requests to the data are

completed, wherein, if the port is busy, the logic mechanism checks the queue for write

requests, and finding a write request also issues a command to temporarily suspend

packet downloads from the LPM until all write requests in the buffer are accomplished

(Column 5, lines 47-52; Column 3, lines 53-67).

Regarding claims 3 and 9, Sharma disclosed the system of claim 1 wherein the

LPM comprises a set of individual memory cells, each cell having an access port

(Figure 1, blocks M's).

Regarding claims 4 and 10, Sharma disclosed the system of claim 3 wherein the

LPM has eight cells (Figure 1, blocks M's), and each cell has two memory access ports

(Figure 2, blocks M's. Each cell M's consists of a "Read" and a "Write" port).

Regarding claims 5 and 11, Sharma disclosed the system of claim 3 wherein

packet downloading is managed by a packet management unit issuing read requests,

and read/write requests (Column 2, lines 22) sent to the buffer (Figure 6, blocks 106-109; column 1, lines 45-50) are other than read requests from the PMU, the PMU reads and the buffer sharing the same port with the PMU reads having priority (Column 5, lines 47-52), and wherein, for packets having data extensive enough to occupy two or more lines of a cell, packet data is interleaved among cells, such that consecutive cells are dedicated to different packets, ensuring that port contention is limited to alternate cycles (Column 2, lines 4-7; column 4, lines 1-14; lines 34-36. Packets are accessed from each cell depending on each cycle and packets are interleaved to narrow the speed processing gap between the processor speed and the memory speed).

Regarding claims 6 and 12, Sharma disclosed the system of claim 3 wherein packets in process are assigned each a specific identifier (Figure 5; column 3, lines 29-39; bank address is provided along with the information in the packets sent to the memory and may stored in the buffer depending on the port contention), and wherein write requests in the buffer are tagged with packet identifiers (Figure 5; column 3, lines 29-39), and the logic mechanism issues commands along with the packet id tag.

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

    a.   Black et al. (U.S. 6,614796), Fibre channel arbitrated loop buffer less switch circuitry to increase bandwidth without significant increase in cost.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Q. Le whose telephone number is 571-272-2246. The examiner can normally be reached on 8 AM -5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SUPERVISORY PATENT EXAMINE'
TECHNOLOGY CENTER 2800   4/28/05